

Remarks

Reconsideration of the application is respectfully requested in view of the foregoing amendments and following remarks. Claims 1-58 are pending in the application. Claims 1, 49, 50, 51, and 57 are independent.

The allowable subject matter of claims 38-39, 43, 45, and 47-48 is noted.

Claim 25 was amended to comply with the Office's suggestion and obviate the objection to the claim. The amendments herein do not necessarily narrow the scope of the claims and are not done for reasons related to patentability.

The rejections raised in the January 30, 2004, Office Action are respectfully traversed, and reconsideration is respectfully requested in light of the above amendments and the following remarks.

Interview Summary

Applicants wish to thank the Examiner for his time during two telephonic interviews. One on June 7, 2004, and another on June 18, 2004.

On June 7, 2004, Applicants discussed claim 1 and the Miura reference. Agreement was not reached, but Applicants agreed to provide a proposed amendment to claim 1.

On June 18, after having reviewed the proposed amendment, the Examiner indicated that with respect to the Miura reference, the proposed amendment to claim 1 overcame the prior art. The proposed amendment is reflected in the amendment to claim 1, above.

Objections to the Drawings

During the interviews, above, the Examiner agreed that the drawing objections regarding text labels could be withdrawn. So, Applicants respectfully request that the drawing objections be withdrawn.

Information Disclosure Statement

Applicants submit herewith an Information Disclosure Statement citing various references and respectfully request consideration of the references by the Examiner.

Section 102(a) Rejection: Miura

Claims 1-2, 8-13, 17-19, 25-37, 40-42, 44, 46, and 50 stand rejected under 35 U.S.C. §102(a) as being anticipated by Miura et al. (U.S. Patent No. 5,886,684, “Miura”).

Claim 1 recites in part (as amended):

presenting a graphical representation of at least a portion of the three-dimensional space;
receiving, within the graphical representation, a user indication of a location within the graphical representation; and
positioning the moveable item at a three-dimensional location in the three-dimensional space corresponding to the location within the graphical representation.

For example, the Application describes FIG. 4 at page 9, lines 1, et seq.:

At 404, the method receives an indication of a point on the image. For example, such an indication can take the form of an operator clicking on a portion of the image at a particular location at which the operator desires to position the item. . . .

At 408, the item is moved to the three-dimensional location in the space.

The Action relies on Miura’s description of a reference point along the Z direction as anticipating the recited arrangement. Applicants respectfully disagree.

Miura’s description of a reference point along the Z direction fails to anticipate “receiving, within the graphical representation, a user indication of a location within the graphical representation” as recited by claim 1. At column 19, lines 6 et seq., Miura describes:

At the step S107, a process operation to set the reference position along the Z direction as shown in FIG. 16, is carried out.

Thus, Miura does describe “set the reference position along the Z direction.” And, elsewhere, Miura describes at column 18, lines 57 et seq., “A judgment is made as to whether or not the Z-position is displayed.” Still elsewhere, Miura describes at column 20, lines 12 et seq.:

. . . both of a bar representation and a numerical value representative of the distance are outputted as character information, and this bar representation indicates the present Z-direction position information measured from the reference position based on the tip position of the fine instrument.

And, at column 20, lines 27 et seq., Miura describes a “representation.” In these passages, however, Miura does not describe that the Z-position is set or displayed by “receiving, within the graphical representation, a user indication of a location.”

Throughout columns 18, 19, and 20 of Miura, where the Z-position is described, Applicants cannot find a description of a user indication of a location that is received within a graphical representation. Further, because Miura does not teach or suggest the indication of a location as recited, it also does not teach or suggest the recited positioning language, which recites “corresponding to the location within the graphical representation.”

Accordingly, Applicants believe claim 1 is allowable at this time.

Claim 50 recites similar language and so is allowable for at least the reasons presented for claim 1.

Section 103(a) Rejection: Miura and Reinhardt

Claims 3-7, 20-24, 49, and 57-58 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Miura in view of Reinhardt et al. (U.S. Patent No. 6,333,749, “Reinhardt”).

Claims 3-7 and 20-24 are directly or indirectly dependent on independent claim 1, the features of which were discussed above with respect to Miura. Although Applicants could argue various features of the claims, in the interest of brevity, Applicants point out that Reinhardt does not supplement the shortcomings of Miura with respect to claim 1. Therefore, claim 1 is allowable over Miura in light of Reinhardt, and so are dependent claims 3-7-20-24, 49, and 57-58.

Reinhardt discloses a technique for constructing a three-dimensional model on top of one or more images (e.g., photographs), such that the model’s parameters automatically match those of the real world object depicted in the photograph. For example, Reinhardt describes at column 4, lines 23 et seq.:

Another objective of the present invention is to provide an improved . . . technique for intuitively manipulating primitives which are used to construct three-dimensional models on a video display or other display screen of a computer system with two-dimensional input controllers (e.g., a mouse, joystick, etc.) such that the displayed three-dimensional object manipulation emulates physical three-dimensional object manipulation.

Thus, Reinhardt does describe a “real world object depicted in the photograph” and “emulates physical three-dimensional object manipulation.” However, Reinhardt does not describe “positioning the moveable item at a three-dimensional location . . . corresponding to the location within the graphical representation” as recited in claim 1.

Applicants have reviewed Reinhardt and cannot find discussion of positioning items at a three-dimensional location corresponding to a location within a graphical representation. The examples describe objects in photographs and a wireframe “graphical representation” overlaid on the image and displayed to the user (*See Reinhardt at column 8, line 10*), but do not understand such descriptions involve positioning an item at a location corresponding to a location within a graphical representation.

Further, Applicants find nothing in Reinhardt or Miura as motivation to combine or modify the other reference to result in the claimed arrangement.

For at least these reasons, dependent claims 3-7 and 20-24 are allowable over Miura in light of Reinhardt.

Claim 49 is an independent claim and recites “receiving, within the graphical image, an indication of a location on the graphical image” and “the item is positioned at a location within the specimen at a location corresponding to the location indicated on the graphical image.” Therefore, claim 49 is also allowable over a Miura-Reinhardt combination.

Claim 57 is an independent claim and recites “wherein the means for presenting a graphical representation of the specimen is operable to accept a user indication of a location within the graphical representation of the specimen” and “operable to send the three-dimensional location to the means for directing the item to direct the item thereto” and is therefore also allowable over a Miura-Reinhardt combination, along with its dependent claim 58.

Section 103(a) Rejection: Miura and Axioskop

Claims 14-16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Miura in view of Axioskop.

Claims 14-16 are directly dependent on independent claim 1, the features of which were discussed above with respect to Miura. Axioskop does not supplement the shortcomings of Miura. Axioskop discloses a microscope with motorized focusing features. At the very least, Axioskop does not teach or suggest *positioning a moveable item at a three-dimensional location in the three-dimensional space corresponding to the location within the graphical representation* as recited by claim 1, nor does it contain any suggestion on how to modify Miura to result in the claimed arrangement.

As such, independent claim 1 is allowable over Miura and Axioskop, whether taken individually or in combination. Furthermore, dependent claims 14-16 are allowable over Miura and Axioskop based on the allowability of their base claim and for the features set forth therein.

Section 103(a) Rejection: Miura and VanArsdale

Claims 51-56 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Miura in view of Daniel W. VanArsdale ("VanArsdale").

Claim 51 recites (emphasis added):

a graphical presentation of a two-dimensional representation of the specimen, wherein the *graphical presentation is operable to receive an indication of a location* on the two-dimensional representation of the specimen;

a converter operable to convert the location . . . into three-dimensional information indicating the three-dimensional location within the specimen. . . ; and

a manipulation device operable to receive the three-dimensional information . . . to *position the item at a three-dimensional location indicated by the three-dimensional information*.

The Action relies on Miura in light of VanArsdale. At page 7, lines 10 et seq., VanArsdale describes:

If a formula requires a hyperplane matrix, Procedure B can be used to convert a point matrix representation of a flat to a hyperplane representation.

Thus, VanArsdale does describe "convert a point matrix." However, Applicants cannot find where VanArsdale teaches or suggests a "graphical presentation is operable to receive an indication of a location on the two-dimensional representation of the specimen" or positioning an item indicated by three-dimensional information from which the location has been converted. Further, VanArsdale does not contain any suggestion of how Miura could be modified to result in the claimed arrangement. Mere description of conversion is not sufficient to reject the claim, even in combination with Miura.

Therefore, Applicants believe independent claim 51 is allowable over Miura and VanArsdale, whether taken individually or in combination. Furthermore, dependent claims 52-56 are believed to be allowable over Miura and VanArsdale based on the allowability of their base claims and for the features set forth therein.


Conclusion

Therefore, claims 1-58 are believed to be in a condition for allowance, and an early action to this end is respectfully solicited. If any issues remain, the Examiner is formally requested to contact the undersigned attorney prior to issuance of the next Office Action in order to arrange a telephonic interview. It is believed that a brief discussion of the merits of the present application may expedite prosecution. Applicants submit the foregoing formal Amendment so that the Examiner may fully evaluate Applicants' position, thereby enabling the interview to be more focused.

This request is being submitted under MPEP § 713.01, which indicates that an interview may be arranged in advance by a written request.

Respectfully submitted,

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